UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

FEDERAL HOUSING FINANCE AGENCY, AS CONSERVATOR FOR THE FEDERAL NATIONAL MORTGAGE ASSOCIATION AND THE FEDERAL HOME LOAN MORTGAGE CORPORATION, Plaintiff, -against- NOMURA HOLDING AMERICA INC. et al., Defendants.	11 Civ. 6201 (DLC)

DIRECT TESTIMONY OF PETER D. RUBINSTEIN

I, Peter D. Rubinstein, declare as follows:

1. I currently work as a consultant in the mortgage and real estate industries. My current and past clients include a hedge fund that was largely involved in purchasing subprime and Alt-A residential mortgage-backed securities, a loan originator, and two government agencies, one of which is the plaintiff in this case. I consult on a wide variety of topics, including securitization, property valuation, the credit ratings process, and default and prepayment modeling.

2. I was retained in this case by Quinn Emanuel Urquhart & Sullivan, LLP, counsel for Plaintiff Federal Housing Finance Agency ("FHFA") as conservator for the Federal National Mortgage Association ("Fannie Mae") and the Federal Home Loan Mortgage Corporation ("Freddie Mac" and with Fannie Mae, the Government-Sponsored Enterprises or "GSEs"), to explain residential mortgage backed securitizations, including (i) the key participants in the

securitization process, such as the originator(s), sponsor, depositor, trustee, and securities underwriter(s); (ii) the process of securitizing residential loans into residential mortgage-backed securities, including the sourcing of mortgage loans, the structuring of the securitization, the transfer of loans to the trust, and the issuance, marketing and sale of the securities; and (iii) the financial incentives and functions of participants in the securitization process during the 2005 to 2007 time period. My discussion is intended to be a general explanation of the typical securitization process; there may be particular transactions that deviate in specific ways from the general process I discuss.

A. Qualifications

3. I have approximately forty years of experience in the real estate and financial industries with a focus on real estate, the mortgage markets, and securitizations. Over the past 33 years, I have worked at various large organizations including investment banks, commercial banks, and rating agencies, as both a banker and researcher in the private-label residential, commercial, and asset-backed securities markets, which include Alt-A and subprime mortgage products. Firms I have worked at include: Citicorp Real Estate, Inc.; Moody's Investor Service; Donaldson, Lufkin & Jenrette; PaineWebber, Inc.; Chase Securities; Prudential Securities; Bear Stearns; Realpoint GMAC; Bloomberg LP; and Morningstar Credit Ratings. I also taught and researched in academia, focusing on residential mortgages and securitizations.

4. I received my Master of Business Administration ("MBA") from the University of California, Berkeley in 1981, where I focused on real estate, real estate finance, and urban economics, including both the residential and commercial markets. Following the receipt of my MBA, I began work in the financial industry for Citicorp Real Estate, Inc. as a commercial real estate loan officer.

5. In 1983, I returned to the University of California, Berkeley to pursue a doctorate in Business Administration, which I obtained in 1990. As with my MBA, I focused on real estate, real estate finance, and urban economics, including both the residential and commercial markets. For my doctoral dissertation, I developed new models for pricing residential adjustable-rate mortgages.

6. From 1988 to 1992, I was an Instructor and then an Assistant Professor of Finance at the University of Texas at Austin. I taught courses covering both the residential and commercial markets, including topics such as real estate, mortgages, real estate and mortgage valuation, real estate development, and securitization. I focused my research on residential mortgages, particularly in the areas of loan pricing, default, and prepayment. Since leaving that position in 1992, I have taught courses on residential mortgages and residential mortgage securitization at Baruch College's Zicklen School of Business as an Adjunct Professor, and I taught commercial real estate cash flow analysis as a guest lecturer at the Urban Land Institute.

7. In 1992, I was hired out of academia as the Chief Mortgage Economist at Moody's Investors Service. As Chief Mortgage Economist, my duties and responsibilities included overseeing research (which involved publishing and presenting research to customers regarding our assessment of market risk) and maintaining the quantitative ratings models related to non-Agency residential mortgage-backed securities. I was involved in monitoring the performance, post-issuance, of all residential mortgage-related transactions, including subprime mortgages, and provided input on whether and when to upgrade or downgrade transactions, including subprime products.

8. In 1994, I was hired by Donaldson, Lufkin & Jenrette ("DLJ") as a Senior Vice President in charge of non-Agency mortgage research. My duties and responsibilities included:

(i) performing extensive research on DLJ's captive subprime conduit, Quality Mortgage USA Inc., and captive subprime servicer, Calmco, Inc.; (ii) drafting and presenting research findings regarding the issuance and trading of residential mortgages and residential mortgage-backed securities, including the early subprime and Alt-A markets; and (iii) developing detailed delinquency, default, prepayment, and loss reports for both internal and external use. While at DLJ, I focused my research on credit analysis.

9. In 1997, I was hired by PaineWebber Inc. as Senior Vice President in charge of non-Agency mortgage research, including subprime mortgages. My duties and responsibilities were similar to my role at DLJ, although I expanded my research scope to include both prepayment and credit analysis as well as some research related to commercial mortgage-backed securities ("CMBS"). I also began a research program for a then-new residential product known as high loan-to-value ("HLTV") mortgages.

10. In 1998, I was hired by Chase Securities as Vice President to co-head and rebuild its residential mortgage securitization business. My duties and responsibilities included working as a banker to arrange subprime, Alt-A, and jumbo residential mortgage-backed securitizations. This position included overseeing the entire securitization process from soliciting loan originators, working with rating agencies, designing structures for the securitizations, structuring the cash flows, performing issuer and loan-level due diligence, and helping the sales force and trading desk to market securities. Our team at Chase securitized billions of dollars of residential mortgages, including Alt-A and subprime mortgages from originators such as Centex Home Equity Company, LLC, Saxon Mortgage, Inc., Chase Mortgage, and Conseco Finance Corp.

11. In 1999, I was hired by Prudential Securities as Senior Vice President in charge of residential non-Agency mortgage and asset backed securities research. My duties and

responsibilities were similar to my work at DLJ and PaineWebber, and included developing, overseeing, and presenting subprime research. During this time I also expanded my research focus to occasionally include securities backed by credit card, auto, and student loans. For a few months of my tenure at Prudential, I also worked as a subprime banker closing transactions for Prudential's warehousing department, which extended lines of credit secured by mortgage loans to loan originators.

12. In 2001, I was hired by Bear Stearns & Co. Inc. as a Managing Director in charge of research relating to CMBS. My duties and responsibilities included writing regular research articles as well as producing special research reports and primers on topics of interest, presenting research at investor road shows and in one-on-one meetings with clients, overseeing the construction of a loan-level commercial loan database, and developing data reports.

13. In 2005, I was hired by Realpoint-GMAC Institutional Advisors ("Realpoint") as Senior Vice President in charge of real estate and CMBS research. Realpoint was a web-based resource launched and wholly owned by GMAC Institutional Advisors to provide CMBS information to investment professionals. My duties and responsibilities included overseeing risk modeling, publishing research articles, and developing and marketing new products. I developed a second-generation risk model for evaluating default and loss probabilities in commercial real estate loans and portfolios.

14. In 2006, I was hired by Bloomberg as the Business Manager in charge of the CMBS business and the real estate platform, which included residential real estate. I designed and oversaw the development of new functions and data pages for the Bloomberg terminal, running a team of approximately twelve programmers and ten data analysts. The products I

developed included advanced-yield calculators, credit-related analytics, loan-level data pages, aggregated delinquency data, and economic statistics relevant to the real estate markets.

15. In 2010, I was hired by Morningstar Credit Ratings, LLC as Managing Director in charge of all research. My duties and responsibilities included heading all research efforts, running the private client services group, and heading up the development of new ratings models for securitizations, including a new model for residential mortgages, which included subprime and Alt-A mortgages. My team designed and built a residential mortgage rating platform, with models to predict prepayments, defaults, and losses on a loan-by-loan basis. I also worked with the head of the residential ratings group to design the rating methodology supported by the model.

16. In 2011, I began working as an independent consultant. In this capacity, I built models to estimate residential home prices, commercial real estate defaults, and commercial real estate prepayments. I also worked on rating agency related litigation, as well as litigation related to cases similar to this current case.

B. RMBS Securitizations Generally

17. Liquidity is a measure of how quickly one can transfer an ownership interest in an asset for full value. Cash and large-cap public stocks (companies with market capitalization greater than $10 billion) are highly liquid, for example, while real estate and individual mortgage notes are not. At its core, securitization transforms illiquid assets into a more liquid form of ownership, which creates value. Most securities are certificates (in either paper or electronic form) that evidence ownership in either equity interests, such as stock certificates, or debt interests, such as bonds. Structured finance is the name given to the market for securities backed by pools of loans, leases, or other similar cash-flow producing assets. Structured finance is

considered to be part of the fixed income (bond) market rather than the equity (stock) market, and participants call the certificates "bonds."

18. The term "securitization" refers to the process of converting an asset or a group of assets into a security. Examples of common assets that are securitized include auto loans, mortgages, and credit card debt. The term "securitization" can also refer to any group of assets that has been securitized.

19. The term "mortgage-backed securitization" ("MBS") refers to a securitization of mortgages. A "mortgage" is a loan secured by real property. The loan is documented by a promissory note in which the borrower acknowledges the debt and promises to pay it back over a defined period of time, typically with interest. If the borrower does not repay the debt, the mortgage document allows the lender to force a sale of the property to satisfy the debt. There are residential mortgages (loans collateralized by 1-4 family residential properties) and commercial mortgages (loans collateralized by commercial properties).

20. Securitizations backed by residential mortgages are called residential mortgage-backed securities, or "RMBS" for short. With the exception of one class called the "residual," all the certificates created in an RMBS are treated as debt investments for both tax and accounting purposes because the income stream on the security comes from debt instruments: the principal and interest payments collected from the underlying residential mortgages.

21. RMBS in general are sometimes considered to be a subset of asset-backed securities ("ABS"). In addition, subprime residential mortgage-backed securities are often considered to be part of the ABS market rather than RMBS market for historical reasons. For the purpose of this report, I will use the term RMBS to include subprime mortgage-backed securities as well as Alt-A and Jumbo residential mortgage-backed securities.

22. In RMBS, a large number of mortgage loans are pooled into a single trust. The overall pool is often subdivided into separate groups of loans with similar characteristics. The securities issued (which are referred to in the industry as certificates or bonds) are often backed primarily by only one group of loans.

C. Participants In the RMBS Market

23. At a very general level, the key participants in the RMBS market include: (i) the loan originator(s), (ii) the sponsor of the securitization, (iii) the depositor, (iv) the trust, (v) the trustee, (vi) the securities underwriter(s), (vii) the servicer(s) of the loans, and (viii) the rating agencies. I will discuss the role of each of these participants.

24. The basic steps involved in securitizing residential mortgages are as follows: (i) a mortgage lender or loan originator originates loans for sale into the secondary market; (ii) a sponsor, also sometimes called an arranger, purchases such loans for the purpose of securitizing them; (iii) the sponsor then sells the loans to a special purpose, bankruptcy remote vehicle known as a depositor, which is usually created by the sponsor; (iv) the depositor in turn transfers the loans to a trust in exchange for certificates of beneficial ownership in the trust;[1] and (v) the depositor sells such certificates to the securities underwriter(s) who markets and sells such certificates to investors. As part of this process, two or more rating agencies review the transaction and assign credit ratings to the transaction, and a trustee and servicer(s) are hired to administer the transaction after issuance.

25. A loan originator is a mortgage lender who originates the loans by lending money to homeowners. Most originators have proprietary underwriting methods and guidelines used to

[1] These certificates, commonly called bonds, generally entitle the owner of the certificates to payments of principal and/or interest on the bonds.

originate loans. A key purpose of the guidelines is to create loans that are consistent with well-defined market conventions so that investors know what they are buying.

26. Some transactions identify a party called a seller in the prospectus supplement. The term has various meanings. A seller is typically a loan originator or an aggregator that acquires loans from originators for the purpose of collecting the loans into pools and then selling such pools to a securitization sponsor. Sometimes, however, the term seller means the sponsor.

27. A sponsor purchases loans from originators or loan aggregators for the purpose of securitizing them. The sponsor is the entity with primary responsibility for creating the securitization and bringing the offering to fruition, including determining the other participants and the pool of loans to be included in the securitization. While both sellers and sponsors sell loans, the distinguishing characteristic of a sponsor is that it is the entity that holds title to the loans immediately before they are transferred to the depositor. The sponsor and the seller are often the same entity, or may be affiliates.

28. The sponsor profits from the difference between (i) the cash proceeds received from selling the loans to the depositor, the value of any interests retained in the securitization, the cash flows received from the loan pool awaiting securitization, and the sale of servicing rights, and (ii) the cost of acquiring and pooling such loans, including the cost of financing the same. The largest source of revenue for the sponsor is the cash paid to the sponsor by the depositor (which, in turn, was received by the depositor from the sale of the certificates to the underwriter).

29. The sponsor's greatest expenditure is the cost of the loans. The sponsor also incurs costs for: (i) legal and other fees related to the securitization; (ii) interest on money borrowed to carry the loans; (iii) unreimbursed losses due to defaults or early prepayments; (iv)

normal administrative expenses for overhead such as office space and staff; and (v) performing diligence on the loans it purchases.

30. The sponsor sells the loans to be securitized to the depositor. The depositor is a special purpose vehicle ("SPV") organized primarily for the purpose of establishing a true sale of the mortgage assets by the sponsor, which protects certificateholders against the risk of a subsequent bankruptcy by the sponsor. The depositor sets up the trust and deposits the loans purchased from the sponsor into the trust in exchange for the certificates, which represent the entire beneficial ownership interest in the trust. The depositor, on behalf of the trust, also issues registration statements and other offering materials associated with the securitization. As an SPV, the depositor has no assets, no employees, and no business operations or purpose other than to carry out the transfer of mortgage loans to implement the securitization.

31. The trust is another special purpose vehicle (in addition to the depositor), created for the purpose of owning the mortgage loans and generally is administered by a trustee for the benefit of the certificateholders. The trust is typically established pursuant to a Pooling and Servicing Agreement ("PSA"), which sets forth the rules governing how the trust is to be administered, including the management of the trust, the servicing of the loans, the distribution of cash flows to investors, and the issuance of the certificates. The PSA also governs the transfer of loans into the trust and contains the representations and warranties among all parties to the securitization, including any loan-level representations regarding the loans that are transferred from the depositor to the trust.

32. To pay for the loans, the depositor sells the certificates to the underwriter(s).

33. There may be multiple underwriters on a securitization, including a lead underwriter, a co-lead underwriter, and an underwriter in the syndicate. The lead underwriter

usually designs the structure of the securitization and coordinates with the rating agencies to obtain credit ratings for the deal. Typically, a lead underwriter is an investment bank that is responsible for, among other things: (i) performing due diligence to ensure that the offering documents are accurate and complete; (ii) purchasing the certificates from the depositor; and (iii) selling the certificates to investors.

34. Each underwriter – whether lead or otherwise – earns fees for taking on the risk of selling the certificates and also earns interest on the certificates while they are held. Underwriters usually make a secondary market in the certificates they underwrite, meaning they stand ready to buy or sell such certificates. By making a secondary market, underwriters can also earn income by offering to buy these certificates at a lower price than they are willing to sell them.

35. The underwriter(s) has a special role in that it is responsible for independently verifying information relating to the securitization, akin to being a gatekeeper. As discussed above, the underwriter(s) is responsible for performing due diligence to ensure that the representations in the offering materials such as the registrations statements, marketing materials, and prospectus supplements are accurate and complete. This diligence would include, *inter alia*, verifying the statements in the offering materials about: (i) the compliance of the underlying loans to specified underwriting guidelines; and (ii) the accuracy of statistical data in the collateral tables, including information about loan-to-value ("LTV") ratios, combined loan-to-value ("CLTV") ratios, owner occupancy status, and debt-to-income ("DTI") ratios. The underwriter also verifies that the final rating issued on the certificate is as represented in the marketing materials.

36. The underwriter(s) sells the certificates to investors.

37. There are two additional participants who have an ongoing role in the management and administration of the securitization: the trustee and the servicer. The trustee oversees the trust formed by the depositor and acts on the trust's behalf both at issuance of the securities and during the life of the securitization. The trustee or an affiliate of the trustee generally is responsible for maintaining custody of the operative documents related to the mortgage loans, receiving the cash flows each month from the servicer(s) for the loans, and allocating the cash flows to certificateholders and other parties to the transaction according to the specific payment rules set forth in the PSA. The trustee may pay other parties to help administer the trust. One such example is a document custodian, who ensures that the trust maintains physical custody of the loan and mortgage documents.

38. The trustee also produces a monthly report called a remittance report, which is essentially a set of income statements and balance sheets for the trust as a whole, for each loan group, and for the individual certificates. While the level of detail varies by deal and trustee, the remittance report typically accounts for all funds collected, all disbursements, the balances of the pool, loan groups, and certificates at the beginning and end of the month, and all prepayments, delinquencies, defaults, and loan liquidations. Trustees are paid an upfront and/or monthly fee for their services.

39. The servicer interacts directly with the individual borrowers on behalf of the trust. For current mortgage loans, the servicer collects and processes monthly mortgage payments of principal and interest, prepayments and prepayment penalties (if any), and aggregates and forwards the cash received to the master servicer (defined below) or trustee if there is no master servicer. For delinquent mortgage loans, the servicer generally advances the delinquent payments and then works with the borrower to obtain the delinquent monthly mortgage

payments. For each non-performing loan, depending on the delinquency status and the type of loan (subprime, Alt-A, or jumbo), the servicer will take steps to cure the delinquency. In the early stages of default, the servicer will typically contact the borrower by mail and phone to remind him/her to pay. If the borrower does not pay, most servicers will commence foreclosure proceedings that may result in the trust obtaining ownership of the mortgaged property, thereby becoming REO (which stands for "Real Estate Owned," and is the term for the property acquired by the trust at a foreclosure auction). The servicer is responsible for: (i) maintaining the REO property and preparing it for sale; (ii) coordinating with the mortgage insurance provider, if any, in preparation for claim filing; (iii) coordinating with a real estate broker and attorneys for an REO property sale; and (iv) aggregating and forwarding any liquidation proceeds together with any mortgage insurance proceeds to the master servicer (or trustee, if there is no master servicer). For all mortgage loans, the servicer aggregates, prepares, and forwards loan-level data reports to the master servicer or trustee on a monthly basis.

40. The servicer receives a monthly fee for its work, which is typically calculated as a percentage of the then-outstanding loan balance. The servicer may also earn interest on the mortgage payments it collects from the borrowers prior to disbursement to the trustee. In addition, the servicer sometimes escrows property taxes and property insurance premiums, and may earn interest on the escrowed account.

41. Some securitizations may have a master servicer to coordinate multiple servicers in a trust or to support a financially weak servicer or one inexperienced with securitizations. The master servicer collects and reconciles monthly remittances and loan-level data reports from individual servicers, aggregates and forwards cash received and loan-level data reports to the trustee, and advances any cash not received from individual servicers to the trustee and pursues

servicers for reimbursement. Master servicers earn fees for their work that is usually a fixed percentage of the then-outstanding loan balance and/or interest on the funds awaiting disbursement.

D. The Securitizations In This Case

42. The following information is based on my review of the prospectus supplements for the securitizations in this case. The following seven RMBS are at issue in this case: (i) NAA 2005-AR6, (ii) NHELI 2006-FM1, (iii) NHELI 2006-FM2, (iv) NHELI 2006-HE3, (v) NHELI 2007-1, (vi) NHELI 2007-2, and (vii) NHELI 2007-3 (the "Securitizations").

43. Nomura Credit & Capital, Inc. ("Nomura Credit"), a wholly owned subsidiary of Nomura Holding America, Inc. ("Nomura Holding"), was the sponsor for all of the Securitizations.

44. Nomura Asset Acceptance Corporation ("NAA") and Nomura Home Equity Loan, Inc. ("NHELI") were the depositors for the Securitizations. NAA was depositor for the NAA 2005-AR6 securitization and NHELI was depositor for the remaining six securitizations.

45. The underwriters for the Securitizations included Nomura Securities International, Inc. ("Nomura Securities"), RBS Securities Inc. ("RBS Securities") (formerly Greenwich Capital Markets Inc. ("Greenwich")), and in one securitization, non-party Lehman Brothers Inc. Nomura Securities was the lead underwriter for the NAA 2005-AR6 and NHELI 2006-FM1 securitizations and was the co-lead underwriter for the NHELI 2006-HE3 securitization. Greenwich, now RBS Securities, was the lead or co-lead underwriter in the following four securitizations: (i) NHELI 2006-FM2, (ii) NHELI 2006-HE3, (iii) NHELI 2007-1, and (iv) NHELI 2007-2.

46. **Plaintiff's Exhibit 1435,** which I reproduce below, reflects the sponsors, depositors, and underwriters for each securitization:

Securitization	Tranche	Sponsor	Depositor	Lead Underwriter
NAA 2005-AR6	IIIA1	Nomura Credit	NAA	Nomura Securities
NHELI 2006-FM1	IA	Nomura Credit	NHELI	Nomura Securities
NHELI 2006-FM2	IA1	Nomura Credit	NHELI	Greenwich (now RBS Securities)
NHELI 2006-HE3	IA1	Nomura Credit	NHELI	Greenwich (now RBS Securities), Nomura Securities
NHELI 2007-1	II1A	Nomura Credit	NHELI	Greenwich (now RBS Securities)
NHELI 2007-2	IA1	Nomura Credit	NHELI	Greenwich (now RBS Securities)
NHELI 2007-3	IA1	Nomura Credit	NHELI	Lehman Brothers Inc.

47. The primary originators of the loans in the Securitizations include Aegis Mortgage Corporation, Alliance Mortgage Banking Corp., EquiFirst Corporation, First NLC Financial Services, LLC, Fremont Investment & Loan, Ownit Mortgage Solutions, Inc., People's Choice Home Loan Inc., ResMAE Mortgage Corp., and Silver State Mortgage. These originators were specifically named and discussed in the prospectus supplements.

E. The Acquisition Of Mortgage Loans For Securitization

48. When acquiring mortgage loans for a securitization, many sponsors purchase pools of loans in bulk transactions. In bulk transactions, sponsors typically purchase a large pool of recently funded and similarly underwritten loans of the same product type from a single seller, who is a well-established originator with whom they have done business in the past. Sponsors may also engage in mini-bulk purchases, which are similar to bulk purchases but contain a smaller bundle of loans. Small loan sellers sometimes lack the capital to assemble a bulk pool; in these cases, a sponsor may offer to buy the loans as they are originated, which is called buying on a "flow basis." Additionally, to the extent that the sponsor is also an originator or has an affiliated originator, it may originate its own supply of loans or source loans from its in-house originator, also called a "captive" originator.

49. Regardless of the acquisition channel, the loans offered for sale should be originated pursuant to a set of underwriting guidelines, which set forth the policies and

procedures for originating a loan. The originator's analysis of a borrower's capacity to pay, credit-worthiness, and the collateral, as well as the ultimate decision to extend a loan, is typically governed by this set of formal, written underwriting guidelines. Underwriting guidelines are intended to ensure that loans are originated in a consistent manner, and assist the loan underwriter in assessing the borrower's ability to pay and the sufficiency of the collateral value. They also help the originator decide the terms on which to approve a loan to a borrower. The applicable underwriting guidelines may vary by product type and origination channel.

50. As part of the loan acquisition process, the originator/seller generally issues a request for bid on a particular pool of loans. In addition, the originator/seller may provide a loan tape to a prospective sponsor that contains information about the various collateral characteristics of each of the loans included in the pool, including FICO score, LTV/CLTV ratio, DTI ratio, occupancy status, documentation type, loan amount, and property type.

51. The purchase of the pool of loans by the sponsor from the seller is generally governed by a contract, usually entitled the Mortgage Loan Purchase Agreement ("MLPA"), which contains a variety of transaction-level and loan-level representations and warranties.

52. The loans that are to be included in the securitization are then sold to the depositor, and then transferred to the trust for securitization.

F. Types of Securities Issued

53. The debt securities or notes issued from the trust are certificates representing a beneficial ownership in the cash flows from the trust's assets and are commonly called bonds. These certificates are backed by the underlying mortgage loans in that the payments a borrower makes in the form of principal and interest on the mortgage loan are collected by the servicer, passed to the trustee, and ultimately distributed to the certificateholders (the investors) pursuant to the terms of the priority of payments structure specified in the PSA.

54. Certificates may be backed by only one group of loans, or may be backed by different groups of loans within the trust, such that a certificateholder has rights to the flow of cash from a specific set of loans. A loan group can include loans originated by different originators. Loans from different acquisition pools may be pooled together in one group, or loans from a single acquisition pool may be split up into different groups. The GSEs generally purchased certificates that were supposed to be backed by loans that met GSE loan size limits and other GSE requirements. The specific loan groups that collateralize the certificates purchased by an investor are known as supporting loan groups ("SLGs").

55. The payments made to investors who purchase certificates consist of payments of principal and interest on the certificates. These payments are a function of the underlying payments of principal and interest by the individual borrowers on the underlying mortgage loans in the pool. The payments on the certificates also depend on the value of the mortgaged properties collateralizing the mortgage loans in the pool because the remedy for defaulted loans that are not cured is to foreclose and then sell the property, using the sales proceeds to repay as much of the loan as possible. In addition, payments to the certificateholders also depend on the securitization structure, commonly called the waterfall (discussed further below). The waterfall causes the overall prepayment and credit risk in the pool to be differentially redistributed among the certificateholders, typically with the intent of protecting the senior certificates against losses at the expense of the junior certificates.

G. Credit Enhancement

56. Credit enhancement is the improvement of the credit profile of some bonds in a structured financial transaction as a result of internal features such as subordination, excess spread, and overcollateralization, or external features such as bond insurance, discussed in the next paragraph below. Credit enhancement is an essential part of the securitization process, and

is critically important to credit rating agencies when rating a securitization. Credit rating agencies set rating levels according to how much credit enhancement is provided in relation to the risk they perceive in the pool of underlying assets. The resulting credit ratings affect investors because most investors follow investment guidelines that restrict purchases and holdings to certificates with specific credit ratings.

57. There are two broad types of credit enhancement: internal credit enhancement and external credit enhancement. Internal credit enhancement in non-agency RMBS can take various forms, the most common of which are subordination, excess spread, and overcollateralization. Common forms of external credit enhancement include bond insurance or financial guarantees. All forms of credit enhancement impose costs and cut into sponsor, issuer, and, potentially, securities underwriter profit margins. As a result, those entities seek to minimize the credit enhancement needed for a particular rating, and the associated expense of such credit enhancement.

58. Subordination refers to a structure in which each class of bonds has a different right to the interest payments, principal payments, and losses generated by the underlying assets. One class of bonds, designated as the senior class, is given a first claim on interest and principal cash flows, and a last position with regard to losses. All other bonds are subordinate to the senior class, however the subordinate bonds themselves have a similar arrangement in that one class of subordinate bonds is senior to all other subordinate bonds, another is senior to the remaining bonds, and so on until there is a last bond called a first loss bond that is subordinate to all other bonds. Rights to interest and principal are allocated in sequential order based on the level of seniority, and losses are assigned based on the reverse order of seniority.

59. Subordination is created at the inception of the deal and is established through the priority of payment waterfall and also by the rules for the allocation of loss. These payment rules are contained in the PSA.

60. In senior/subordinated structures, the senior class typically receives more than its pro rata share of principal payments early on in the transaction. In most transactions, the subordinate bonds can only start to share in the prepayments and liquidation proceeds if the transaction is performing well, where performance tests are typically based on the losses and delinquency rates of the underlying pool. Prepayments are initially allocated to the senior classes of the deal to make sure that the subordinate classes remain outstanding for a sufficiently long period of time (and increase as a percentage of the total certificates outstanding) to ensure availability and sufficiency of credit support to the senior tranches.

61. Credit support is important because different investors have different risk appetites. Investors are willing to accept lower yields on higher rated certificates because they carry less risk. The junior subordinated classes of certificates usually have the lowest credit ratings. Investors in the most junior classes, which suffer losses earlier, are typically compensated at a higher yield for this risk. There are also "mezzanine" classes between the senior certificates and the low-rated certificates that offer another tradeoff between yield and risk. Investors in senior classes prefer safer investments, although they earn less in interest.

62. In transactions that use excess spread, the coupon payments on the certificates in the aggregate are almost always lower than the interest generated by the underlying assets in the pool. This feature generates excess interest – the difference between the interest paid to the certificates and the net interest collected from the underlying assets. This differential is known as excess spread and is often expressed as the difference between the weighted average net

interest rate on the underlying assets and the weighted average coupon rate paid to investors. Excess spread generates excess interest cash flow, meaning more interest than is needed to pay the interest owed on all of the certificates.

63. Excess interest is often used as a form of credit support in subprime RMBS. The mechanism is complex. Transactions that use this excess spread are structured with a rating agency specified level of excess collateral, called overcollateralization, which means that the sum of the mortgage balances of the loans in the securitization exceeds the sum of the balances on the certificates by a certain percentage or amount. This overcollateralization is like a shock absorber designed to protect the bonds from loss. Whenever a loss occurs, and the level of overcollateralization falls, the excess interest is then used as needed to replenish the level of overcollateralization by paying off principal on the most senior bonds. This mechanism was designed to work around securitization rules that do not allow issuers to directly add collateral to a pool once it is issued.

64. In a transaction that contains multiple SLGs, excess interest left over from one loan group is usually made available to support certificates backed by a separate loan group (and vice versa). Sometimes, only the senior certificates are backed by a specific loan group, while the subordinate certificates are backed by the entire pool and the excess spread. Excess spread can also be used to pay back past losses taken on bonds, if any.

65. In most transactions, excess interest cash flow represents a portion of the value from a securitization, so the parties to a transaction typically tried to maximize this excess interest.

66. A common way for sponsors, issuers, and underwriters to maximize the amount of excess interest collected was to maximize the size of the senior certificates. Maximizing the

size of the senior certificates optimized profits because these certificates, due to their lower risk profile, typically paid the lowest coupon rate. As a result, they generate more excess interest than subordinate certificates, which carry higher coupon rates. From the issuer's point of view, more excess interest equals more profit. The issuer's incentive is to make more money by selling the bonds at higher prices and lower coupons.

67. Sponsors, issuers, and underwriters were therefore incentivized to maximize the size of the senior certificates in order to maximize the excess interest (i.e., the profit). Similarly, the parties were incentivized to reduce the size of the higher-coupon subordinate tranches, which in turn resulted in less credit protection for the senior certificates. The goal would be to structure a deal with the minimum amount of subordination to achieve the desired rating.

68. As a practical matter, the certificates issued in RMBS need credit enhancement to be acceptable to investors because without credit enhancement, every certificate holder would be exposed to every loss in the pool. In general terms, credit enhancement is a measure taken with the goal of reducing credit risk and boosting the credit rating of a security. It improves the credit profile of nearly all the bonds in a structured financial transaction despite the credit risk of the underlying assets. For example, in the RMBS context, even if the underlying collateral is risky such as subprime or Alt-A loans, sufficient credit enhancement can provide enough additional cushion against losses so that the senior tranches would be protected from losses as well as in any other similarly rated security.

H. Credit Rating Agencies

69. As set forth above, there are a variety of ways that securitizations are structured and provided with credit enhancement, which protects senior noteholders even if the underlying collateral is risky, such as subprime loans. The structure of a security and its resulting credit enhancement is a key feature of rating agency's analysis in determining a rating.

70. Credit ratings are grades assigned to securities that reflect the expectation of the credit risk of owning that security. The higher the rating, the less risky the bond. Senior classes are usually rated AAA, the highest rating level, while junior classes have lower credit ratings. A rating of AAA is intended to reflect the same level of credit-worthiness regardless of asset class. Thus, an RMBS backed by Alt-A or subprime loans that is rated AAA should have the same credit risk as a AAA-rated RMBS that is backed by prime loans. However, the level of credit enhancement required to support a AAA rating for a security backed by a pool of prime assets would be lower than one backed by a pool of subprime assets.

71. The sponsor, depositor, or the securities underwriter provided information about the underlying mortgage loans in the securitization to the rating agencies so that they could evaluate the risk in the pool and issue credit ratings for the certificates. The information about the underlying mortgage loans was contained on a pre-closing loan tape that contained approximately 50 to 80 data fields for each loan, including collateral characteristics such as FICO score, DTI ratio, LTV/CLTV ratio, loan purpose, property type, interest rate, interest rate adjustment type (fixed versus adjustable), presence of a balloon payment, owner occupancy status, documentation program, appraised value, and the presence of mortgage insurance. These characteristics separately, and collectively, were used in the industry by issuers, underwriters, and rating agencies to predict the likelihood that the borrower would default on the mortgage. Based in part on this information, the rating agencies would determine the appropriate level of credit enhancement based on their estimation of projected loss severities and foreclosure frequencies.

72. No party, not the sponsor, depositor, nor the securities underwriter, provided the rating agencies with loan files. In addition, the rating agencies did not verify the information

contained on the pre-closing loan tapes, but instead relied on the sponsor or underwriter to provide accurate information. To the extent the information contained in the pre-closing loan tape was materially inaccurate, the ratings also would not be accurate.

I. Marketing of the Securities

73. Publicly offered securities are issued pursuant to registration statements. A registration statement is a set of documents, including a base prospectus and a prospectus supplement, which a company must file with the United States Securities and Exchange Commission before it can proceed with a public offering. Registration statements are signed by the officers of the depositor.

74. A registration statement can be filed as a "shelf" registration that allows for multiple securitizations to be issued based on the same registration statement. The base prospectus makes the required disclosures to render the shelf registration statement effective, and is generally filed with the registration statement.

75. The base prospectus is a disclosure document required by and filed with the SEC that provides investors with a generic description of information about the deal, including the types of participants in the securitization, the possible structures for the securitization, and the types of underlying mortgage loans. The base prospectus is supplemented later on by a prospectus supplement.

76. The prospectus supplement is filed closer to the time of issuance (once a specific pool of collateral has been identified) and provides more detail relating to the specific offering. The prospectus and prospectus supplement together contain information about the securities offered for sale to investors. A prospectus and its supplement contain the facts that an investor needs to make an informed investment decision. The prospectus supplement discloses detailed

pertinent information relating to the specific series of securities that are being issued, including information on the loans underlying those securities and the specific parties involved.

77. During the initial public offering process, when the certificates are first offered for sale to potential investors, the securities underwriter(s) markets the certificates to investors for a period of days or weeks through its sales force, and oftentimes through investor meetings or road shows.

78. A prospectus supplement contains information about, among other things: (i) the various participants in the securitization, including the names of the sellers, sponsor, depositor, trust, trustee, servicers, and master servicer; (ii) the specific structure of the securitization; (iii) the origination and underwriting practices of the originators of the underlying mortgage loans; and (iv) the underwriting guidelines applicable to such loans and the loan programs pursuant to which they were originated.

79. In addition, a prospectus supplement generally contains the following quantitative information about the loans collateralizing the securities: (i) the total number of loans in the pool; (ii) the total outstanding and original dollar balance of the loans; (iii) the average original loan size; (iv) the average current loan size; (v) the weighted average original loan-to-value ratio; (vi) the weighted average current mortgage rate; (vii) the weighted average remaining term to maturity; (viii) the weighted average credit score; and (ix) aggregate data on various other collateral characteristics, including loan product type, loan purpose, property type, income and asset documentation requirements, debt-to-income ratios, occupancy status, credit grades, and the age of the loan. Data is also usually disclosed about the number and type of prepayment restrictions the loans carry (if any), the geographic characteristics of the pool, and the existence of any mortgage insurance on the loans. If the pool is divided into SLGs, each of which

primarily backs a different set of certificates, disclosure is made at both the total pool level and the collateral group level. Distribution data for many data elements are also often disclosed so that investors can get a sense of the spread of the data around the average. Some prospectuses present cross-tabulated data so that an investor can analyze subsets of the pool.

80. The information in the offering materials about the mortgage loans in the securitizations is critical to allow investors to make investment decisions. In RMBS, the performance of the certificates purchased by the investor is directly linked to the performance of the underlying mortgage loans that serve as collateral for the certificates. For this reason, the credit risk, prepayment risk, pricing, and performance of the certificates in an RMBS can be accurately evaluated only if the information about the credit characteristics of the mortgage loans that collateralize the certificate is accurately disclosed in the offering materials.

J. Financial Incentives In RMBS

81. Based on my experience, RMBS was a volume business from 2005 to 2007. As I explain below, participants were incentivized to do as many deals, and as many large deals, as possible.

82. As detailed above, each of the participants in the securitization had the potential to earn revenue from the securitization process. Given that these revenues were in large part dependent on the implementation of the securitization, and in some cases, the dollar value of the securitization or the certificates issued, certain participants in the securitization structure had substantial financial incentives to complete as many securitizations and offerings as possible.

83. During the 2005 to mid-2007 time period, both the supply of and demand for certificates securitized by non-agency mortgage loans increased significantly. Demand grew due to growth in the number of mortgage-backed securities buyers, the return of capital to existing mortgage investors from prepayments that needed to be reinvested, the growth in collateralized

debt obligations ("CDOs") backed by RMBS and ABS, a rise in the number of hedge funds active in this sector, a perceived attractive risk reward profile offered by non-agency mortgage-backed securities, and the strength of the economy which increased the overall pool of investable cash. According to the Securities Industry and Financial Markets Association ("SIFMA"), the total dollar amount of outstanding non-agency RMBS grew from $1.0856 trillion in the first quarter of 2004 to its peak of $2.8139 trillion in the second quarter of 2007, an increase of 159% in only three and a half years. Agency residential mortgage-backed securities outstanding grew by only 23% over this same time frame.

84. Increasing demand for securities during this period created competition among issuers for loans. To compete, issuers (*i.e.*, the investment banks) attempted to ensure continued access to a supply of mortgage loans by establishing, preserving, and building on relationships with originators.

85. One way to build these relationships was for investment banks to provide warehouse lines of credit to originators. In the context of this industry, a warehouse line of credit is a short-term lending facility provided by an investment bank to a mortgage loan originator. The originator uses the lending facility as needed to purchase or originate mortgage loans. The money is repaid from the proceeds from the sale of the loans. These lines of credit were secured by the mortgage loans awaiting securitization. The warehouse lending agreements generally contained eligibility requirements for the loans that constituted the borrowing base, and specified the appropriate discount or haircut to be applied to loans based on the loans' risk characteristics. Many of the investment banks leveraged their business relationships from the warehouse lending agreements with originators to develop opportunities to purchase pools of loans for its securitization business.

86. In addition, during the 2005 to 2007 time period, it was common for the various participants in an RMBS deal, including the seller (originator or aggregator), sponsor, depositor, and securities underwriter, to be related or affiliated entities. These vertically integrated business structures enabled the participants in the securitization to have access to greater information about the underlying mortgage loans. Vertical integration means one party to the transaction owns or is affiliated with most of or all of the other parties to the securitization. It may be an originator, sponsor, depositor, underwriter, or servicer. For example, in connection with its role in purchasing mortgage loans from an affiliated seller, the sponsor would have access to better loan-level information about the quality of the underlying mortgage loans, including the loan origination file and applicable underwriting guidelines. In addition, participants in the securitization were able to exercise more direction and control at each step in the process (origination, securitization, and sale), within the bounds of the legal and regulatory framework, and earn fees at each step of the securitization process.

87. The affiliation of participants in a securitization created potential conflicts of interest because it eliminated the normal checks and balances existing when all parties are unrelated. As members of the same corporate family, affiliated sellers, sponsors, depositors and underwriters shared parallel financial incentives because a loss suffered by any one entity is a loss to the organization overall. These incentives might cause them to protect each other, rather than having the type of adversarial relationship an underwriter ought to have with a sponsor. For example, an underwriter may have been reluctant to reject a defective or unacceptable loan from an affiliated sponsor because both entities stood to lose if the loan was rejected: if the underwriter rejects the loan, the sponsor is stuck with the loss, but the corporate family (to which both the sponsor and underwriter belong) shares this loss.

K. Informational Asymmetry Between Investors and Participants In The Securitization

88. Information asymmetry refers to an imbalance in information about a given topic. For example, information asymmetry exists in the RMBS securitizations because investors in RMBS do not have access to as much information about the underlying loans as the sponsor and underwriter.

89. RMBS prospectus supplements represented that the mortgage loans backing the certificates were underwritten in accordance with underwriting guidelines and described in general terms the underwriting criteria used to originate the loans. Whether the loans were actually underwritten in compliance with guidelines was significant because the purpose of underwriting guidelines is to assess the borrower's ability and willingness to repay the loan and the adequacy of the mortgaged property as collateral for the loan. False representations about compliance with underwriting guidelines would present a misleading picture concerning the quality of the collateral underlying the RMBS and, therefore, affect the viability of the payment stream on which RMBS investors depended for repayment of principal and interest.

90. Investors, including the GSEs, did not have access to the loan origination files to determine whether the loans were in fact originated pursuant to the underwriting guidelines disclosed in the prospectus supplements.

91. In contrast, sponsors and their affiliated entities involved in the acquisition and securitization of mortgage loans had access to information about the individual loans due to their involvement in the acquisition process. For example, as part of their acquisition level diligence, sponsors had access to the loan origination files and underwriting guidelines. As such, sponsors had the ability to determine whether the loans were underwritten in compliance with underwriting guidelines, and had the opportunity to engage in discussions with originators regarding their origination and underwriting practices generally, and as specifically applied to

the loans in the acquisition pool. Additionally, sponsors had access to loan-level performance information from servicers, including any delinquency and default information for the loans in the securitizations.

92. In addition, securities underwriters had access to underwriting guidelines and all the information in the loan file for each individual loan due to their involvement in the offering and sales process. As such, underwriters had the ability to determine whether the loans were underwritten in compliance with underwriting guidelines.

93. Where participants in a securitization were related or affiliated, as in a vertically integrated securitization business model explained above, the universe of information available could be expanded. Subject to legal and regulatory requirements, this information was available to share across related or affiliate entities. Thus, due to vertical integration, participants in the securitization such as the seller, sponsor, and securities underwriter would have access to a greater amount of information. For example, affiliated underwriters had the opportunity to engage in discussions with the sponsors regarding their acquisition practices generally, and also the sponsors' knowledge regarding the originators' lending and underwriting practices. Typically, the senior individuals working at the sponsor, underwriter, and depositor were the same group of people. Moreover, given the sponsors' access to loan-level performance information from servicers, the underwriter could investigate the knowledge sponsors had including any delinquency and default information for the loans in the securitizations.

94. Sponsors and securities underwriters had access to certain third-party and proprietary models for pricing and valuation of the securities and underlying mortgage loans. The inputs to these models generally included collateral characteristics such as credit score, LTV and CLTV ratios, documentation type, and occupancy status. Because sponsors and affiliated

underwriters (by virtue of their access to the sponsor's information) could have better information regarding the underlying collateral characteristics and credit quality, they could have a better ability to estimate expected defaults, delinquencies, and prepayments of the underlying mortgage pool.

95. Similarly, underwriters could access additional information about the underlying mortgage loans to the extent that they or their affiliates extended warehouse lines of credit to originators to fund the origination of mortgage loans. The collateral for the extension of credit was the mortgage loans themselves. In setting eligibility requirements for the loans backing the line of credit, underwriters were assessing the same loans they would later purchase and securitize.

96. The increased availability and access to information in a vertically integrated securitization business model has the potential to create conflicts of interest. For example, to the extent that the available information reveals that the underlying mortgages are defective in some way, such as having inaccurate information or failing to comply with guidelines, a vertically integrated institution will have increased incentives to get those loans off its books by selling them in a securitization. The rational for such a strategy is that the sponsor and underwriter may be able to make more money by having a larger deal while avoiding the costs associated with disposing of defective loans. Although access to this same information should cause the underwriter to conduct further diligence and exclude such loans from the securitization, an affiliated underwriter may have an incentive to conduct less diligence to avoid the circumstance where its affiliated sponsor is unable to securitize the loans, and is forced to retain the credit risk on its books.

97. Based on my experience in the mortgage industry, there are several features of the RMBS securitization process that may impact the incentives of the participants, particularly given the asymmetry of information between the participants in the securitization process and investors that the participants could exploit. First, participants were incentivized by volume-based revenue to complete as many deals as quickly as possible. Second, the competition for a limited supply of loans impacted the behavior of participants. Third, where participants are affiliated, they may be incentivized to close a transaction including defective, misstated, or otherwise ineligible loans, rather than performing their individual roles and obligations to exclude such loans.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is a true and correct statement of my opinions in this Action.

Executed on this 20th day of February, 2015 in Westchester, New York.

PETER D. RUBINSTEIN